

Application No. 10/605,489
Docket No. 129284
Amendment dated February 22, 2005
Reply to Office Action of December 22, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (currently amended): A stator bar of a dynamoelectric machine, the stator bar having an outer groundwall insulation surrounding a perimeter thereof and extending along a longitudinal length thereof, the outer groundwall insulation comprising:

at least one extruded member comprising an electrical insulation layer and an opposing pair of edges parallel to the longitudinal length of the stator bar, the edges being attached together along the seam so that the perimeter of the stator bar is entirely enclosed by the at least one extruded member, the opposing pair of edges abutting each other to define a seam that is substantially parallel to the longitudinal length of the stator bar, the opposing pair of edges comprising complementary interlocking features that physically secure the edges together, each of the interlocking features being continuous along a corresponding one of the edges so as to be substantially parallel to the longitudinal length of the stator bar.

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Claim 2 (canceled)

Claim 3 (currently amended): A stator bar according to claim 1, wherein ~~the opposing pair of edges abut each other to define a seam that is substantially parallel to the longitudinal length of the stator bar, and the~~ opposing pair of edges are welded together.

Claim 4 (original): A stator bar according to claim 1, wherein the at least one extruded member comprises a single extruded member that defines each of the opposing pair of edges that are attached together.

Claim 5 (original): A stator bar according to claim 4, wherein the single extruded member has a rectangular outer perimeter defining four corners and four sides therebetween.

Claim 6 (original): A stator bar according to claim 5, wherein the opposing pair of edges are located along one of the four corners of the outer perimeter of the single extruded member.

Claim 7 (original): A stator bar according to claim 5, wherein the

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opposing pair of edges are located on one of the sides of the outer perimeter of the single extruded member.

Claim 8 (original): A stator bar according to claim 1, wherein the at least one extruded member comprises two extruded members, each of the two extruded members defining a corresponding one of the opposing pair of edges that are attached together.

Claim 9 (original): A stator bar according to claim 8, wherein each of the two extruded members defines a corresponding one of a second opposing pair of edges that are attached together.

Claim 10 (original): A stator bar according to claim 8, wherein each of the two extruded members are C-shaped.

Claim 11 (currently amended): A stator bar according to claim 1, wherein the complementary interlocking features comprise: ~~further comprising:~~

slots defined in each of the opposing pair of edges so that each slot of a first of the opposing pair of edges opposes a corresponding one of the

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slots of a second of the opposing pair of edges; and

a member secured by an interference fit in each pair of the opposing slots to mechanically secure together the opposing pair of edges.

Claim 12 (previously presented): A stator bar according to claim 1, wherein the electrical insulation layer of the at least one extruded member is chosen from the group consisting of electrometric and filled thermoplastic materials.

Claim 13 (currently amended): A stator bar for a generator used in power generation of alternating current delivered to a distribution network, the stator bar comprising:

a bare bar comprising strands of electrical conductors oriented parallel to each other and strand electrical insulation surrounding each of the strands of electrical conductors; and

an outer groundwall insulation surrounding a perimeter of the bare bar and extending along a longitudinal length of the bare bar, the outer groundwall insulation comprising at least one extruded member containing an electrical insulation layer, the at least one extruded member comprising an opposing pair of edges parallel to the longitudinal length of the stator bar, the edges abutting

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each other so as to define a seam that is substantially parallel to the longitudinal length of the stator bar, the edges being welded together along the seam so that the perimeter of the bare bar is entirely enclosed by the at least one extruded member and the outer groundwall insulation forms a substantially void-free barrier around the bare bar, the opposing pair of edges comprising complementary interlocking features that physically secure the edges together, each of the interlocking features being continuous along a corresponding one of the edges so as to be substantially parallel to the longitudinal length of the stator bar.

Claim 14 (canceled)

Claim 15 (currently amended): A stator bar according to claim 13, ~~claim 14~~, wherein the interlocking features comprise a projection that is continuous along a first of the opposing pair of edges and a recess defined in and continuous along a second of the opposing pair of edges.

Claim 16 (currently amended): A stator bar according to claim 13, ~~claim 14~~, wherein the interlocking features comprise:
slots defined in each of the opposing pair of edges so that each slot

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of a first of the opposing pair of edges opposes a corresponding one of the slots of a second of the opposing pair of edges; and
a member secured by an interference fit in each pair of the opposing slots to mechanically secure together the opposing pair of edges.

Claim 17 (original): A stator bar according to claim 13, wherein the at least one extruded member comprises a single extruded member that defines each of the opposing pair of edges, the single extruded member having a rectangular outer perimeter defining four corners and four sides therebetween, the opposing pair of edges being located along either one of the four corners of the outer perimeter of the single extruded member or along one of the sides of the outer perimeter of the single extruded member.

Claim 18 (previously presented): A stator bar according to claim 17, wherein the single extruded member further comprises an inner layer of a conductive material on an interior surface of the electrical insulation layer and an outer layer of a conductive material on an exterior surface of the electrical insulation layer.

Claim 19 (original): A stator bar according to claim 13, wherein the at

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least one extruded member comprises two extruded members, each of the two extruded members defining a corresponding one of the opposing pair of edges that are attached together and defining a corresponding one of a second opposing pair of edges that are attached together, each of the two extruded members being C-shaped.

Claim 20 (previously presented): A stator bar according to claim 19, wherein each of the two extruded members further comprises an inner layer of a conductive material on an interior surface of the electrical insulation layer and an outer layer of a conductive material on an exterior surface of the electrical insulation layer.

Claims 21 through 40 (canceled)